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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,183	06/08/2006	Peter J. Milner	BKR-2680201	1542
25006 7590 11/18/2008 GIFTORD, KRASS, SPRINKLE, ANDERSON & CITKOWSKI, P.C PO BOX 7021 TROY, MI 48007-7021				
EXAMINER				
PANG, ROGER L				
ART UNIT		PAPER NUMBER		
3655				
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11/18/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,183

Applicant(s)

MILNER, PETER J.

Examiner

Roger L. Pang

Art Unit

3655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,2 and 4-10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-850)
Paper No(s)/Mail Date 10-21-08
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Inventor's Patent Application
6) ☐ Other: _____

DETAILED ACTION

The following action is in response to the amendment filed for application 10/579,183 on October 21, 2008.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, and 4-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Milner '256. With regard to claim 1, Milner teaches a continuously variable transmission device of the type having planetary members 21 in rolling contact with radially inner 36/37 and outer 13/14 races each comprising axially spaced relatively axially movable parts, and control means 10 for determining the axial separation of the parts of one of the two races, in which the planets are connected for drive transmission to an input 30 or output member 29 of the transmission device by connection means which allows the radial position of the planets to vary in response to variation in the axial separation of the parts of the said one of the two races, and in which the generatrix of the curved surface of at least one of the races and/or the planets is non-circular (Fig. 7) and in which the curved rolling contact surface of the races and the planets is a volute, involute or evolute curve (page 5, lines 18-20; page 4, lines 20-25). With regard to claim 2, Milner teaches the device, in which at least part of the generatrix of the curved rolling contact surface of at least one of the races and/or the planets is discontinuous (Fig. 7). With regard to

claim 4, Milner teaches the device, in which at least one part of the generatrix of the curved rolling contact surface of at least one of the races and the planets is more sharply curved than at least one other part (Fig. 8). With regard to claim 5, Milner teaches the device, in which the said control means include two adjustment members 13/14 interengaged by helical interengagement means 15 such that relative turning motion of one of the adjustment members results in relative axial displacement between the two adjustment members (Fig. 1). With regard to claim 6, Milner teaches the device, in which the connection means between the planets and a planet carrier comprises a connector plate having a plurality of slots, having at least a radial component, within each of which a part of a respective planet is engaged (Fig. 1). With regard to claim 7, Milner teaches the device, in which the said slots are inclined to a radial line passing through the slot in such a way as in use to apply or have applied thereto a force having both a radial and a circumferential component (Fig. 1; Fig. 6). With regard to claim 8, Milner teaches the device, in which the said radially inner and outer races are located within a fixed housing and one or other of the said races is rotatable with respect to the housing by the input or output shaft of the transmission device (Fig. 1). With regard to claim 9, Milner teaches the device, characterized by having a fixed ratio epicyclic gear in the drive train to its output drive member and/or from its input drive member (Fig. 1). With regard to claim 10, Milner teaches the device, in which the two parts of the radially outer race and/or the radially inner race are interconnected by means of a helical coupling, with rolling elements between the two parts to reduce friction (Fig. 1).

Response to Arguments

With regard to the Milner '256 reference, applicant argues that surfaces of the races AND the planets are not non-circular, nor are they volute, involute or evolute.

Applicant pointed out a passage in the specification (page 5, lines 20 - page 6, line 24) discussing an embodiment where the roller element surface is an arc of a circle. However, it can be shown on page 5, lines 18-20, that the surface of revolution of each roller element of each planetary body is defined by a curvilinear generatrix that "need not be a part of a circle nor, indeed, does it have to be symmetrical or even a regular curve." On page 12, Milner goes further in explaining that the planets form a prolate or oblate spheroid. This would be defined by a spheroid in which the polar diameter is longer than the equatorial diameter and vice versa, respectively. These are not perfect spheres and not circular, as applicant contends.

With regard to the races, on page 4, lines 20-25, Milner explains that the shape of the races have to correspond (but not match) to that of the planets. Therefore, both the races AND the planets are not circular in shape, thereby being volute, involute or evolute (as claimed).

With regard to the continuity arguments of claims 2 and 4, applicant's definition of "continuous" appears to be describing one continuous circular arc. Therefore Milner does disclose a discontinuous race and/or planet. Also, the races and the planets do have a more sharply curved surface than the other part since a prolate or oblate spheroid defines this.

Applicant's arguments have been considered, but are not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. The central facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses

requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on _____ (Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L. Pang whose telephone number is 571-272-7096. The examiner can normally be reached on 5:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roger L Pang/
Primary Examiner, Art Unit 3655

Roger L Pang
Primary Examiner
Art Unit 3655

November 14, 2008

Application Number**Application/Control No.**

10/579,183

Examiner

Roger L. Pang

**Applicant(s)/Patent under
Reexamination**

MILNER, PETER J.

Art Unit

3655